These special posters will be displayed Monday - Thursday

Special **Ion Chemistry "Down Under" : A History of Mass Spectrometry in Australia and New Zealand**; Kevin M. Downard[1]; ANZSMS Community[2]; [1]*University of Sydney, Sydney, Australia*

Special **An Annotated Bibliography of Guidelines Proposed for Mass Spectral Method Performance**; Robert Bethem[2]; Jane Gale[3]; David Heller[1]; Steven Musser[1]; Phil Price[4]; Stephen Stein[5]; [1]*Food and Drug Administration, Washington, DC;* [2]*Alta Analytical Laboratory, El Dorado Hills, CA;* [3]*Bristol-Myers Squibb, New Brunswick, NJ;* [4]*Union Carbide, S Charleston, WV;* [5]*NIST, Gaithersburg, MD*

MONDAY POSTERS

Monday posters will be set up 7:30 – 8:00 am on Monday morning. Presenters of odd numbered posters (001, 003, 005, etc) will attend their posters 8:45 – 10:15 am on Monday. Presenters of even numbered posters (002, 004, 006, etc) will attend their posters 1:30 – 3:00 pm. Posters should be removed 7:30 – 8:00 pm on Monday evening.

INSTRUMENTATION, 001 - 030

MPA 001 **Low Energy SID and High Energy CID MS/MS Experiments in a Hybrid Sector-TOF Instrument**; Arpad Somogyi; Darrin L. Smith; Eugene N. Nikolaev; Vicki H. Wysocki; *University of Arizona, Tucson, AZ*

MPA 002 **Tandem Mass Spectrometry With a Dual Trap TOF-MS**; Yang Wang; Melvin Park; Ulrich Giessmann; *Bruker Daltonics, Inc., Billerica, MA*

MPA 003 **Single Scan MS/MS in MALDI-TOF**; Aurelio La Rotta[1]; Armin E. Holle[1]; Franz Hillenkamp[2]; [1]*Bruker Daltonik GmbH, Bremen, Germany;* [2]*Institut für Med. Physik und Biophysik, Münster, Germany*

MPA 004 **Parametric Evaluation of the QqTOF oMALDI Ion Source**; George Scott; Jian Zhao; *AB MDS Sciex, Concord, ON, Canada*

MPA 005 **Parameters Affecting Mass Resolution in a MALDI Quadrupole Ion Trap Time-of-Flight Mass Spectrometer**; Emmanuel Raptakis; Koichi Tanaka; *Kratos Analytical Ltd, Manchester, UK*

MPA 006 **Performance Benefits of a Quadrupole Ion Trap, TOFMS (QitTof)**; Mark A. Hanning-Lee; Karl A. Hanold; Matthew D. Evans; Jack A. Syage; *Syagen Technology, Inc., Tustin, CA*

MPA 007 **Extending the Dynamic Range of an Orthogonal Time of Flight (oa-TOF) Mass Spectrometer, for Quantitation and Exact Mass Measurement**; Martin R. Green; Michael Jackson; John Hoyes; Robert H. Bateman; Anthony Newton; *Micromass UK Ltd, Manchester, UK*

MPA 008 **Enhanced Product Ion Sensitivity in a QqTOF for Protein Identification**; Bruce A. Thomson; Chris M. Lock; Igor V. Chernushevich; *Applied Biosystems/MDS SCIEX, Concord, Canada*

MPA 009 **Combining Mass Correlated Acceleration and a Curved Field Reflectron**; Andrew R. Bowdler[1]; Robert J. Cotter[2]; Slava V. Kovtoun[2]; [1]*Kratos Analytical Ltd, Manchester, UK;* [2]*Johns Hopkins University, Baltimore, MD*

MPA 010 **Focusing Properties of a Harmonic Field Ion Reflectron;** Mark Mills; Victor C. Parr; Steve P. Thompson; *Scientific Analysis Instruments, Manchester, England*

MPA 011 **Design Principles and First Application of a Three-Element Non-Linear Ion Mirror in an Orthogonal Acceleration Time-of-Flight Mass Spectrometer**; Christie G. Enke; Jun Zhang; *The University of New Mexico, Albuquerque, NM*

MPA 012 **Field-Portable, High-Speed GC/TOFMS**; Brian J. Nies; Matthew D. Evans; Karl A. Hanold; Jack A. Syage; *Syagen Technology, Inc., Tustin, CA*

MPA 013 **Miniaturized EI/Q/oa TOF Mass Spectrometer Coupled to an Air Monitoring System**; Vadym Berkout[1]; Don Segers[2]; Robert Cotter[1]; [1]*The Johns Hopkins University, Baltimore, MD;* [2]*O.I.Analytical, CMS Field Products, Pelham, AL*

MPA 014 **Miniaturized Linear Time-of-Flight Mass Spectrometer with Delayed Extraction**; Slava V. Kovtoun; Maria C. Prieto; Robert J. Cotter; *Johns Hopkins University, Baltimore, MD*

MPA 015 **The Development of Mechanically Robust Microchannel Plates for Mass Spectrometry**; Herman J. Boeglin[1]; Kiki H. Hosea[1]; Rudy G. Benz[2]; Randy L. Lundberg[2]; Nelson Devoe[2]; [1]*K and M Electronics, Inc., West Springfied, MA;* [2]*ITT Industries Night Vision, Roanoke, VA*

MPA 016 **Taming the Jitter in a Discrete Dynode TOF Detector**; Dick Stresau; Kevin L. Hunter; Wayne Sheils; *ETP Electron Multipliers, Ermington, NSW, Australia*

MPA 017 **A New Hybrid Detector for TOF-MS Combines an MCP with a Fast Discrete Dynode Detector to Realize New Performance Levels**; Kevin L. Hunter; Wayne Sheils; Dick Stresau; *ETP Electron Multipliers, Ermington, NSW, Australia*

MPA 018 **Use of On-line Image Processing to Study the Homogeneity of the Gain and to Improve a Linear Response of the Microchannel Plate Imaging Detector**; Eugene Moskovets; *Barnett Institute, Boston, MA*

MPA 019 **The Development of an Ultra-Fast Microchannel Plate Detector for Time of Flight Mass Spectrometry**; Bruce N. Laprade; Raymond Cochran; Ronald Starcher; *Burle Electro-Optics INC, Sturbridge, MA*

MPA 020 **Construction of the New Multi-Turn Time-of-Flight Mass Spectrometer 'MULTUM II'**; Michisato Toyoda[1]; Daisuke Okumura[1]; Morio Ishihara[1]; Itsuo Katakuse[1]; Fumio Kunihiro[2]; Masao Shimizu[2]; [1]*Osaka University, Toyonaka, Japan;* [2]*JEOL Ltd., Akishima, Japan*

MPA 021 **Automated Exact Mass Measurement Using Coaxial Multiple Passing Time of Flight Mass Spectrometry**; Ching Wu; Thomas A. Dresch; Ulrich P. Giessmann; Melvin A Park; *Bruker Daltonics Inc., Billerica, MA*

MPA 022 **The Methods of Analysis of Solids by Laser TOF Mass-Spectrometer LAMAS-10M**; Grigori B. Kouznetsov; Sergey S. Poteshin; Alexandr A. Sysoev; *Moscow Engineering Physics Institute, Moscow, Russia*

MPA 023 **TOF for Monitoring of Fast Processes**; Katrin Fuhrer[1]; Marc Gonin[1]; Michael I. McCully[1]; Thomas Egan[1]; Steven R. Ulrich[1]; Val W. Vaughn[1]; William D. Burton Jr. [1]; John A. Schultz[1]; Kent Gillig[2]; David H. Russell[2]; [1]*Ionwerks Inc., Houston, TX;* [2]*Texas A&M University, College Station, TX*

MPA 024 **Sensitivity Improvement by 2-3 Orders of Magnitude and Significantly Raised Sample Throughput, Even Under Inert Conditions by In Source Liquid Injection FD;** H. Bernard Linden; *Linden CMS GmbH, Leeste, Germany*

MPA 025 **Development and Characterization of a Radio-Frequency Glow Discharge Time-of-Flight Mass Spectrometer for Polymer Analysis**; Brad Knippel; R. Kenneth Marcus; *Clemson University, Clemson, SC*

MPA 026 **Analysis of Aerosol Samples Using a Bio-Collector and Py-MAB-TOF**; Pascal Martin[1]; Claude Beaugrand[2]; [1]*Dephy Technologies, Montreal, QC, Canada;* [2]*MGP Instrument, Lamanon, France*

MPA 027 **Considerations for Accurate Simulations of Fon Trajectories with SIMION 3D in an Inductively Coupled Plasma-Time-of-Flight Mass Spectrometer (ICP-**

TOFMS); David P. Myers; Kimberly Miller; *LECO Corporation, St. Joseph, MI*

MPA 028 **Ion Dispersion Near Grids in Time-of-flight Mass Spectrometers - The Critical Effect of the Angle of Incidence**; Mark J. Lewin[1]; Michael Gulihaus[1]; Frank Read[2]; Jason Wildgoose[3]; John Hoyes[3]; Robert Bateman[3]; *[1]The University of New South Wales, Sydney, Australia; [2]Department of Physics, Manchester, UK; [3]Micromass UK, Manchester, UK*

MPA 029 **Solving the Dynamic Range Problem for Fast GC/TOF-MS**; Stephen C. Davis; Andrew D. Hoffman; Nick P. Bukowski; Lu Lin; Jonathan D. Hughes; Alexander A. Makarov; Sergey A. Smirnov; *Thermo Finnigan, Manchester, UK*

MPA 030 **Novel Data Acquisition System for GC/TOFMS: Dynamic Signal Tracking**; Viatcheslav Artaev; Timothy Hall; Wayne Hedman; Kevin McNitt; Mark Merrick; Joel Mitchell; *LECO Corporation, St. Joseph, MI*

ION ACTIVATION/DISSOCIATION. 031 - 065

MPB 031 **Structural Studies of Synthetic Compounds by FT-ICR-MS/MS;** Paul J. Gates; Mark Healy; Steven V. Ley; *Chemistry Dept., Cambridge University, Cambridge, UK*

MPB 032 **The Fragmentation of N-oxides (Deoxygenation) in Atmospheric Pressure Ionization: Investigation of the Activation Process**; Wei Tong; Swapan K. Chowdhury; Kevin B. Alton; James E. Patrick; *Schering-Plough Research Institute, Kenilworth, NJ*

MPB 033 **Qualitative and Quantitative Analysis of a Biologically Active Analog of α-Tocopherol**; Meansup Song; Karin M. Keller; Jennifer S. Brodbelt; *The University of Texas, Austin, TX*

MPB 034 **LC/ES-MS Analysis of Trinitrobenzenic Derivatives of Catecholamines and Aminophospholipids**; Paul Carvey[1]; Su Chen[1]; Ka Wan Li[2]; *[1]Rush Medical College, Chicago, IL, USA; [2]Vrije University, Amsterdam, The Netherlands*

MPB 035 **FT-ICR-MS/MS Studies of Small Biologically Active Materials;** John P. G. Wilkins[1]; Paul J. Gates[2]; *[1]SEAC Contaminants, Unilever Research, Bedfordshire, UK; [2]Chemistry Dept., Cambridge University, Cambridge, UK*

MPB 036 **Positive and Negative Espray-MS/MS of Labelled Homocystines**; Orval A. Mamer[1]; Christine Jacques[1]; John Hoffer[2]; Line Robitaille[2]; *[1]McGill University MS Unit, Montreal, Canada; [2]Lady Davis Institute, Montreal, Canada*

MPB 037 **CID Fragmentation Mechanism of Sameridine and Analogues**; Hans S. von Euler-Chelpin; Magnus Svensson; *AstraZeneca R&D Sodertalje, Sodertalje, Sweden*

MPB 038 **ESI/MS/MS Study of Dopamine and 6-OH-Dopamine**; Chunyan Hao[1]; Raymond E. March[1]; Timothy R. Croley[2]; Su Chen[3]; *[1]Water Quality Centre, Trent University, Peterborough, Canada; [2]University of Arkansas, Little Rock, Arkansas; [3]Ruch Medical College, Chicago, IL*

MPB 039 **Intramolecular Friedel-Crafts Acylation Observed in the Gas-Phase**; Yong-Hyeon Yim; Hyunil Lee; Younghee Lim; Hye-Sung Cho; Yong-Kook Kim; Sang-Lim Ryu; Sung Kee Kim; Jonghoa Ok; *LG Chemical Research Park, Taejon, South Korea*

MPB 040 **A Systematic Investigation of Electrospray Ionization of C3 Isomer of Tris Malonic Acid Fullerene**; Michael A. Grayson[1]; Eva G. Lovett[2]; Laura L. Dugan[2]; Michael L. Gross[1]; *[1]Washington University, Chemistry, St Louis, MO; [2]Washington University, Medical School, St Louis, MO*

MPB 041 **Charge-Remote Fragmentation of Fatty Acids in Resonant Electron Capture**; Valery G. Voinov[2]; Hilde Van den Heuvel[1]; Magda Claeys[1]; *[1]University of Antwerp (UIA), Antwerp, Belgium; [2]Pacific Institute Bioorganic Chemistry, Vladivostok, Russia*

MPB 042 **Charge-Remote Fragmentation of Fatty Acid Carboxylate Anions in Collisional Activation**; Magda Claeys[1]; Liberata Nizigiyimana[1]; Hilde Van den Heuvel[1]; Valery G. Voinov[2]; *[1]University of Antwerp (UIA), Antwerp, Belgium; [2]Pacific Institute Bioorganic Chemistry, Vladivostok, Russia*

MPB 043 **The Identification of Triazapamine and its Metabolites by Mass Spectrometry**; Dmitri Zagorevski; Yuan Yang; Tarra Fuchs; Kent Gates; *University of Missouri, Columbia, MO*

MPB 044 **The Relationship between Fragmentation Pattern of Flavor Compounds and Ion Source Design**; Qingmei Zha; *Brown & Williamson Tobacco Corporation, Macon, GA*

MPB 045 **Applications of Accurate Mass Measurements for Metabolite Identification**; Cornelis E.C.A. Hop; Philip R. Tiller; Xiao Yu; Xin Xu; *Merck Research Laboratories, Rahway, NJ*

MPB 046 **Formation of Molecular Radical Cations of Oligopeptides via Collision-Induced Dissociation of their Cu(II)-Amine Complex Ions**; Elham Bagheri Majdi; Ivan K. Chu; Christopher F. Rodriquez; Alan C. Hopkinson; K.W. Michael Siu; *York Univerisy, Toronto, Canada*

MPB 047 **Determination of Mass Effects on the Dissociation of Diatomic Ions in a Quadrupole Ion Trap;** Glen P. Jackson[1]; Fred L. King[1]; Douglas E. Goeringer[2]; Douglas C. Duckworth[2]; *[1]West Virginia University, Morgantown, WV; [2]Oak Ridge National Laboratory, Oak Ridge, TN*

MPB 048 **Location of Double Bond Positions in Alkenyl Alcohols, Acetates and Aldehydes by Ag(I) Cationization Electrospray Tandem Mass Spectrometry**; Siu Kwan Wo; Chun Wai Tsang; *The Hong Kong Polytechnic University, Hong Kong, China*

MPB 049 **Comparison of the Collisionally-Induced Dissociation of Non-Covalent Complexes at Different Collision Regimes**; Valérie Gabelica[1]; Frédéric Rosu[2]; Nives Galic[1]; Edwin De Pauw[1]; *[1]Mass Spectrometry Laboratory-ULg, Liège, Belgium; [2]Biospectroscopy Laboratory-ULg, Liège, Belgium*

MPB 050 **Complete Sequencing of Mono-Deprotonated Peptide Nucleic Acids by ESI-FTICR-MS and SORI-CID with Internal Calibration of the Product-ion Spectra**; Jason W. Flora; James C. Hannis; David C. Muddiman; *Virginia Commonwealth University, Richmond, VA*

MPB 051 **Effect of Structure on Dissociation: Polyproline**; Allison S. Danell; Gary L. Glish; *University of North Carolina, Chapel Hill, NC*

MPB 052 **In-Source and Metastable-Ion Fragmentation of Electrosprayed Peptides**; William J. Griffiths; *Karolinska Institutet, Stockholm, Sweden*

MPB 053 **Charge State Dependent Fragmentation Behavior of Gas-phase Bovine Ferri-cytochrome c Ions**; Brian J. Engel; Peng Pan; Gavin E. Reid; J. Mitchell Wells; Scott A. McLuckey; *Purdue University, West Lafayette, Indiana*

MPB 054 **Charge State Dependent Dissociation of Gaseous Holomyoglobin Ions in a Quadrupole Ion Trap**; Kelly A. Newton; Paul A. Chrisman; J. Mitchell Wells; Gavin E. Reid; Scott A. McLuckey; *Purdue University Dept. of Chemistry, West Lafayette, IN*

MPB 055 **Fragmentation Behavior of Gaseous Apomyoglobin Ion in a Quadrupole Ion Trap: (M+21H)+21 - (M+2H)+2**; Paul A. Chrisman; Kelly A. Newton; J. Mitchell Wells; Gavin E. Reid; Scott A. McLuckey; *Purdue University, Dept. of Chemistry, West Lafayette, IN*

MPB 056 **Charge State Dependent Sequence Analysis of Ubiquitin Ions via Ion Trap Tandem Mass Spectrometry**; Jin Wu; Gavin E. Reid; Paul A. Chrisman; J. Mitchell Wells; Scott A. McLuckey; *Purdue University. Dept. of Chemistry, West Lafayette, IN*

MPB 057

MPB 058 **Fragmentation Reactions of a_2 Ions Derived from Deprotonated Dipeptides**; Alex. G. Harrison; Gregory A. Chasse; Melody L. Mak; Imre G. Csizmadia; *University of Toronto, Toronto, Canada*

MPB 059 **Unimolecular Chemistry of Protonated Glycylglycine**; Francesco Pingitore[1]; Michael J. Polce[1]; Jody M. Talley[1]; Chrys Wesdemiotis[1]; Bela Paizs[2]; *[1]The University of Akron, Akron, OH; [2]German Cancer Research Center, Heidelberg, Germany*

MPB 060 **Energetics of Fragmentation of $[(Gly)_n+H]^+$, Where n=1-3, Using Threshold CID Experiments and Density Functional Theory**; Houssain El Aribi; Christopher F. Rodriquez; Tamer Shoeib; Yun Ling; Alan C. Hopkinson; K.W. Michael Siu; *York University, Toronto, Canada*

MPB 061 **Metal Ion Bonding Affinities and Activation of Phosphate Esters as Studied by Threshold Collision-Induced Dissociation and Theory**; Hai Huang; Mary T. Rodgers; *Wayne State University, Detroit, MI*

MPB 062 **Thermochemical Properties of Hydroxycarbenes**; Xinping Liu; Paul G. Wenthold; *Purdue University, Chemistry Department, West Lafaeytte, IN*

MPB 063 **Absolute Solvation Enthalpies of Metal Ions by Acetonitrile Determined by Guided Ion Beam Mass Spectrometry**; Anna B. Valina; Guiseppa Vitale; Mary T. Rodgers; *Wayne State University, Detroit, MI*

MPB 064 **Trends in the Binding of Various Nitrogen Donor Ligands to Copper Ions Studied by Guided Ion Beam Mass Spectrometry**; Jennifer E. Shanoski; Mary T. Rodgers; *Wayne State University, Detroit, MI*

MPB 065 **Influence of the Substituents on Cation-p Interactions between Alkali Metal Ions and Substituted Benzene Studied by Collision Induced Dissociation**; Ravi Amunugama; Mary T. Rodgers; *Wayne State University, Detroit, MI*

TRAPPED IONS, 066 - 099

MPC 066 **Ion-Neutral Collision Statistics in Dynamical Simulation**; Bruce B. Reinhold; Ron White; *University of New Hampshire, Durham, NH*

MPC 067 **Gas Phase Formation of Water and Methanol Adducts to Metal Complexes with Nitrogen Donor Ligands**; Jessica M. Barr; Bupani A. Perera; Andrea L. Gallardo; Michael J. Van Stipdonk; *Wichita State University, Wichita, KS*

MPC 068 **Noise Reduction in a Quadrupole Ion Trap Mass Spectrometer with External Ionization**; G. Brody Guckenberger; Scott T. Quarmby; *Thermo Finnigan Corporation, Austin, TX*

MPC 069 **An EI Quadrupole Ion Source for Mass Spectrometry**; Mingda Wang; Ed Cirimele; *Agilent Technologies Inc., Palo Alto, CA*

MPC 070 **Use of Homemade MIMS Interface with Ion Trap Mass Spectrometer for Studying Ion Molecule Reactions**; Loic Beyet; Anne Bossee; Jean Claude Tabet; *LCSOB/Universite Pierre et Marie Curie, Paris, France*

MPC 071 **Production and Collision Induced Dissociation of Alkali Tetrafluoroborate Cluster Ions**; Jamar S. Martin; Mary P. Ince; Bupani A. Perera; Michael J. Van Stipdonk; *Wichita State University, Wichita, KS*

MPC 072 **Characterization of Pharmaceutical Compounds and Related Substances by Using HPLC FTICR-MS and Tandem Mass Spectrometry**; Craig A. J. Kemp; Brian E. Winger; *Eli Lilly and Company, Indianapolis, IN*

MPC 073 **ESI-FT-ICR-MS Analysis of Proteins Using Off-line H/D Exchange**; Jin Duan; Michael A. Freitas; *The Ohio State University, Columbus, OH*

MPC 074 **Direct Mapping of Acetylation Sites in Histone Subunits by ESI FT-ICR MS**; Liwen Zhang; Michael A. Freitas; *The Ohio State University, Columbus, OH*

MPC 075 **Localization of Intramolecular Monosulfide Bridges in Nisin with Bond Selective Tandem Mass Spectrometry**; A. J. Kleinnijenhuis[1]; A. J. R. Heck[1]; R. M. A. Heeren[2]; M. C. Duursma[2]; *[1]Utrecht University, Utrecht, Netherlands; [2]FOM-AMOLF, Amsterdam, Netherlands*

MPC 076 **Electron Impact Induced Fluorescence of Mass-Selected Ions**; Brant Cage[1]; Melinda A. McFarland[2]; Christopher L. Hendrickson[1]; Naresh Dalal[2]; Alan G. Marshall[1]; *[1]National High Magnetic Field Laboratory, Tallahassee, FL; [2]Florida State University, Tallahassee, FL*

MPC 077 **Role of the Vibrational Excited Heterodimers Composed by Amino-Acid/Nucleosides Partners on the PA Determination**; Sandra Alves; Sakina Mezzache; Claude Pepe; Mélanie Quelquejeu; Françoise Fournier; Jean-Marc Valery; Jean-Claude Tabet; *Université Pierre et Marie Curie, Paris, France*

MPC 078 **Enhancement of Sensitivity and Performance to a Benchtop Ion Trap Mass Spectrometer**; Alex Mordehai; Linda L. Lopez; Steven M. Fischer; Charles W. Russ; *Agilent Technologies, Palo Alto, CA*

MPC 079 **Chiral Analysis of Antiviral Nucleoside Analogs by Mass Spectrometry**; W. Andy Tao[1]; Lianming Wu[1]; R. Graham Cooks[1]; Feng Wang[2]; John A. Begley[2]; Bernhard Lampert[2]; *[1]Purdue University, West Lafayette, IN; [2]Triangle Pharmaceuticals, Inc., Durham, NC*

MPC 080 **Rectangular Wave Quadrupole Field and Digital QMS Technology**; Li Ding; Andrew Gelsthorpe; Jim Nutall; Sumio Kumashiro; *Shimadzu Research Laboratory, Manchester, UK*

MPC 081 **Enantiomeric Reduction in the Gas Phase Using Copper(II) Substrate Clusters for Distinguishing Chiral Amino-acids by Electrospray Ionization/Ion Trap Mass Spectrometry**; Valerie Mancel[1]; Denis Lesage[2]; Francoise Fournier[2]; Nicole Sellier[1]; Jean-Claude Tabet[2]; *[1]ENSCP, Paris, France; [2]Universite Pierre et Marie Curie, Paris, France*

MPC 082 **Investigation of Peptides by Metal Complexation in ESI/MS and MS^n in a Quadrupole Ion Trap**; Anne Bossee[1]; Françoise Fournier[2]; Fabrice Modeste[1]; Jean-Claude Tabet[2]; *[1]Centre d'Etudes Du Bouchet, Vert-Le-Petit, France; [2]Université Pierre Et Marie Curie, Paris, France*

MPC 083 **Quantitative Host-Guest Binding Studies by Electrospray Ionization Quadrupole Ion Trap Mass Spectrometry**; Courtney L. Sherman; Jennifer S. Brodbelt; *University of Texas, Austin, TX*

MPC 084 **Maximizing Molecular Structure Determination of Biological Molecules Using a Novel Approach for CID in Ion Trap Mass Analyzers**; Michael C. Zumwalt; Paul C. Goodley; *Agilent Technologies, Palo Alto, CA*

MPC 085 **Modification of a Commercial Quadrupole Ion Trap for Infrared Multiphoton Dissociation**; Karin M. Keller[1]; Chad M. Ostrander[2]; Steven T. Fannin[2]; Jennifer S. Brodbelt[1]; *[1]The University of Texas, Austin, TX; [2]Hitachi Instruments, Inc., San Jose, CA*

MPC 086 **Strategies for High Resolution on the Quadrupole Ion Trap Mass Spectrometer**; Danielle N. Dickinson; James P. Murphy, III; Richard A. Yost; *University of Florida, Gainesville, FL*

MPC 087 **A Miniature Cylindrical Ion Trap Mass Spectrometer**; Brian C. Laughlin; Garth E. Patterson; R. Graham Cooks; *Purdue University, West Lafayette, IN*

MPC 088 **Image Current Detection in a Cylindrical Ion Trap Array**; Garth E. Patterson; Amy M. Gilchriest; R. Graham Cooks; *Purdue University, West Lafayette, IN*

MPC 089 **A Comprehensive Study of Space Charge and Peak Splitting in the Quadrupole Ion Trap**; James P. Murphy III[1]; Scott T. Quarmby[2]; G. Brody Guckenberger[2]; Richard A. Yost[1]; *[1]University of Florida, Gainesville, FL; [2]Thermo Finnigan Corp., Austin, TX*

MPC 090 **Chemical Mass Shifts in the Quadrupole Ion Trap: Effect of Resonance Ejection and Ion Structure**; Hongyan Li[1]; Yanan Peng[1]; Wolfgang J. Plass[2]; R. Graham Cooks[1]; *[1]Purdue University, West Lafayette, IN; [2]Justus-Liebig Universitat Giessen, Giessen, Germany*

MPC 091 **Optimization of Orthogonal Tandem Ion Trap/reTOF/MS**; Carine Marinach[1]; Alain Brunot[1]; Claude Beaugrand[2]; Gérard Bolbach[1]; Jean-Claude Tabet[1]; *[1]LCSOB, UPMC, Paris, France; [2]MGPInstruments BP1, Lamanon, France*

MPC 092 **Fragmentation of Singly-Charged Peptide Derivatives Produced by Atmospheric Pressure Matrix-Assisted Laser Desorption Ionization**; Marsha C. Galicia[1]; Akos Vertes[1]; John H. Callahan[2]; *[1]George Washington University, Washington, DC; [2]Naval Research Laboratory, Washington, DC*

MPC 093 **A MALDI-QIT-TOF for High Resolution and High Accuracy MS^n (n=1,2,3,..)**; Koichi Tanaka; Chris Sutton; Emmanuel Raptakis; *Kratos Analytical Ltd., Manchester, UK*

MPC 094 **Study of the Ion Mobility Dependence on the Ion Velocity in a Segmented RFQ under Various Rotating Excitation Conditions**; Viatcheslav I. Kozlovski; Ilia V. Soulimenkov; Alexander R. Pikhtelev; Valeri V. Raznikov; Ella V. Chardakova; Alexander F. Dodonov; *Inst. of Energy Problems of Chem. Phys., Chernogolovka, Russia*

MPC 095 **Application of the Orbitrap Analyser for Measurements of Total Ion-Neutral Collision Cross Sections**; Mark E. Hardman; Alexander A. Makarov; *Thermo Finnigan, Manchester, UK*

MPC 096 **Interfacing the Orbitrap to an Electrospray Ion Source**; Mark E. Hardman; Alexander A. Makarov; *Thermo Finnigan, Manchester, UK*

MPC 097 **Experiments and Computer Simulations with a Multisection Nested ICR Cell**; Niels Tobias; Karl Peter Wanczek; *University, Inst. Inorg. Phys. Chem., Bremen, Germany*

MPC 098 **New Features of Open Cell Design for Internal Source MALDI FTICR-MS**; Vladimir E. Frankevich; Juan Zhang; Renato Zenobi; *Swiss Federal Institute of Technology, Zurich, Switzerland*

MPC 099 **Deduction of Ion Kinetic Energy Distributions Using Dynamic Voltage Trapping in ICR cells**; V. Sergey Rakov; Eduard V. Denisov; Jean H. Futrell; *Pacific Northwest National Laboratory, Richland, WA*

PROTEIN ASSEMBLIES, 100 - 127

MPD 100 **The Electrostatic Contribution to Protein-SDS Binding Investigated by Charge Ladders and ESI-MS**; Harsha P. Gunawardena; Brian T. Cooper; *UNC Charlotte, Charlotte, NC*

MPD 101 **Gramicidin: Probing Monomer/Dimer Dynamics Using H/D Exchange and ESI-MS;** Raghukalyan Kashyap Chitta; Michael L. Gross; *Washington University, St.Louis, MO*

MPD 102 **Non-Covalent Interactions among Unsolvated Peptides;** David T. Kaleta; Martin F. Jarrold; *Northwestern University, Evanston, IL*

MPD 103 **Non-covalent Interactions of Peptides in Solution; Cross-checking of the Results from Nanoelectrospray Ionization Mass Spectrometry and Computer Simulation**; Keiichiro Ishikawa[1]; Takako Nakamura[2]; Yoshinori Koga[2]; *[1]National Metrological Laboratory, AIST, Tsukuba, Ibaraki, Japan; [2]Advanced Carbon, AIST, Tsukuba, Ibaraki, Japan*

MPD 104 **Decomposition of Multiprotein Complexes in the Gas Phase**; Natalia Felitsyn; Elena Kitova; John S. Klassen; *University of Alberta, Edmonton, Canada*

MPD 105 **ESI-MS vs MS/MS: Solution vs Gas-Phase Binding for Noncovalent Protein Complexes**; Victor Joseph Nesatyy; *Institute for Marine Biosciences, Halifax, Canada*

MPD 106 **Analysis of Noncovalent Protein Complexes by Electrospray-Fourier Transform-Ion Cyclotron Resonance Mass Spectrometry**; Nikolay I. Youhnovski; Kai Bruns; Thilo Fligge; Andreas Seidl; Stephan Buehler; Michael Przybylski; *University of Konstanz, Konstanz, Germany*

MPD 107 **Gaseous Intermolecular Complexes Characterized by Electron Capture Dissociation Mass Spectrometry**; Aaron J. Frank; Bruce Ganem; Scott Bergeron; Fred W. McLafferty; *Cornell University, Dept. of Chemistry, Ithaca, NY*

MPD 108 **Disulfide Bond Structure of a Novel C-type Lectin from Snake Venom**; Rong Zeng; Qiang Xu; Xiao-Xia Shao; Qi-Chang Xia; *Inst. Biochem & Cell Biol. SIBS, Shanghai, P.R.China*

MPD 109 **Determination of the -SH Reactivity of Tubulin Using HPLC-MS/MS**; Joseph P. Nawrocki[1]; Dan Sackett[2]; Lewis K. Pannell[1]; *[1]NIDDK, NIH, Bethesda, MD; [2]NICHD, NIH, Bethesda, MD*

MPD 110 **Identification of Hypochlorite Oxidation Products of Murine S100A8 Containing Novel Sulfinamide Bonds between Cys and Lys residues**; Mark J. Raftery; Carolyn L. Geczy; *University of New South Wales, Sydney, Australia*

MPD 111 **Crosslinking the Subunits αA and αB Reveals Their Organization in the Native α-Crystallin Aggregate**; Catherine L. Swaim[1]; Jean B. Smith[1]; David L. Smith[1]; Eric Forest[2]; *[1]University of Nebraska, Lincoln, NE; [2]Institut de Biologie Structurale, Grenoble, France*

MPD 112 **Repertoire of Thiol-Presenting Proteins in Human Plasma**; Rina Kaneko; Yoshinao Wada; *Osaka Med Ctr Matern & Child Health, Izumi, Osaka, Japan*

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MPD 127 **Gas-Phase Electrophoretic Molecular Mobility Analysis at Atmospheric Pressure of High-Mass Hetero- and Homo-Noncovalent Biocomplexes in Comparison with UV MALDI MS Analysis;** Guenter Allmaier[1]; Gerold Bacher[1]; Martin Zehl[1]; Omar Belgacem[1]; Chris Sutton[2]; Stan Kaufman[3]; Wladyslaw W. Szymanski[4]; *[1]Institute for Analytical Chemistry, Vienna, Austria; [2]Kratos Analytical, Manchester, UK; [3]TSI Inc., St. Paul, MN, USA; [4]Institute for Experimental Physics, Vienna, Austria*

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MPE 129 **Using a Covalent Tag and MALDI Mass Mapping to Identify the Cocaine-binding Site on the Dopamine Transporter Protein;** Sucharita H Bhattacharya[1]; Kermit K. Murray[1]; Brian C. Reed[1]; Joseph B. Justice[1]; Margaret Lowe[2]; Roxanne A. Vaughn[2]; *[1]Emory University, Atlanta, GA; [2]University of North Dakota, Grand Forks,ND*

MPE 130 **Characterization of Neuropeptide Processing in Single Cells by MALDI-MS;** Amanda B. Hummon; Lingjun Li; Rebecca W. Corbin; Jonathan V. Sweedler; *University of Illinois, Urbana, IL*

MPE 131 **Identification of Endogenous Neuropeptides from *in vivo* Microdialysate Samples by Nano-LC Micro-ESI FT-ICR MS;** Terri L. Quenzer[1]; Mark R. Emmett[1]; Per E. Andren[2]; Alan G. Marshall[1]; *[1]National High Magnetic Field Laboratory, Tallahassee, FL; [2]Uppsala University, Uppsala, Sweden*

MPE 132 **Mass Spectrometric Analysis of Peptides and Proteins in Human Lymphocytes with Special Focus on Defensins;** Torbjorn Johnson[1]; Rita Persson[1]; Jonas Bergquist[2]; Johan Gobom[3]; Rolf Ekman[1]; *[1]Clinical Neuroscience, Goteborg University, SU/Molndal, Sweden; [2]Analytical Chemistry, Uppsala University, Uppsala, Sweden; [3]Max-Planck Inst. for Molecular Genetics, Berlin, Germany*

MPE 133 **Detection of Endogenous Neuropeptides in Brain Extracellular Fluids;** Per E. Andrén; Karl Skold; Marcus Svensson; Ulrica Eriksson; Fred Nyberg; *Uppsala University, Uppsala, Sweden*

MPE 134 **In Vivo Microdialysis/Nanospray of Neuropeptides;** Douglas R. Smith[1]; Troy D. Wood[1]; Alexis C. Thompson[2]; Lori L. Badura[2]; James C. Dodge[2]; *[1]SUNY at Buffalo Department of Chemistry, Buffalo, NY; [2]SUNY at Buffalo Department of Psychology, Buffalo, NY*

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MPE 136 **Analysis of Neuroactive Peptides with LC/MS in the Urine of Autisic Patients;** Jannicke Remme[1]; Stephen Koetzner[3]; Karine Haugland[4]; Karl L. Reichelt[2]; Gunnar O. BrÝnstad[1]; *[1]NeuroZym Biotech Inc. Murbraek, Snasa, Norway; [2]Pediatric Research Institute, University of Oslo, Norway; [3]Shimadzu Biotech, Duisburg, Germany; [4]Bergmann AS, Oslo, Norway*

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MPF 140 **A Microfabricated System for Proteome Analysis Using NanoLC-MALDI-Qq-TOF MS;** Devanand M. Pinto[1]; Steven J. Locke[1]; Stewart McKinnon[1]; Ted Hubbard[2]; Marek Kujath[2]; *[1]National Research Council of Canada, Halifax, Canada; [2]Dalhousie University, Halifax, Canada*

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MPF 143 **A Comparison of Protein Identification by MALDI-TOF MS, MALDI Q-TOF MS/MS and LC MS/MS;** Andreas Wattenberg[1]; Neil A. Jones[1]; Richard Tyldesley[2]; Klaus Schneider[1]; *[1]GlaxoSmithKline, Harlow, UK; [2]Micromass, Manchester, UK*

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MPI 211 **LC/MS and LC/MS/MS (QTOF) Characterization of High Molecular Weight Halogenated and Non-Halogenated Humic Material from Canadian Surface Waters;** Kate Stuttaford[1]; John Carey[2]; Mehran Alaee[2]; *[1]University of Guelph, Guelph, ON, Canada; [2]National Water Research Institute, Burlington, ON, Canada*

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[1]ThermoFinnigan, Bremen, Germany; [2]University of Cologne, Cologne, Germany

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MPM 311 **Multiple Scan Modes for the Analysis of Leukotrienes**; Åsa Brunnström; Hans-Erik Claesson; William J. Griffiths; *Karolinska Institutet, Stockholm, Sweden*

MPM 312 **GCMS and HPLC Profiles of Pathogenic Fungi**; Petra Miketova; Karl H. Schram; Ida M. (Ki) Moore; Michael L. Graham; *University of Arizona, Tucson, AZ*

MPM 313 **Structural Analysis of Phospholipid Molecular Species by Postsource Decay Matrix-Assisted Laser Desorption Ionization Mass Spectrometry**; Khalid A. Al-Saad; Vlad Zabrouskov; William F. Siems; N. R Knowles; Richard M. Hannan; Herbert H. Hill Jr; *Washington State University, Pullman, WA*

MPM 314 **Analysis of Neurosteroids in Brain by Nanoscale Capillary Liquid Chromatography/Micro-Electrospray Mass Spectrometry**; Suya Liu; Jan Sjövall; William J. Griffiths; *Karolinska Institutet, Stockholm, Sweden*

MPM 315 **Linoleic Acid Oxidation Catalyzed by Nickel Complexes**; (Peter) Chang-nan Chen[1]; Patrick R. Jones[1]; O. David Sparkman[1]; Andrew Yeh[2]; *[1]University of the Pacific, Stockton, CA; [2]Tunghai Christian University, Taichung, Taiwan, ROC*

MPM 316 **High Resolution UV-MALDI-MS and sPSD-Analysis of Triacylglycerols from Plant Oils**; Gerald Stuebiger[1]; Ernst Pittenauer[2]; Kathryn Ralphson[3]; Guenter Allmaier[1]; *[1]Institute for Analytical Chemistry, Vienna, Austria; [2]Federal Research Centre for Agriculture, Vienna, Austria; [3]Kratos Analytical, Manchester, UK*

MPM 317 **A Fully Automated Atmospheric Pressure Chemical Ionization Mass Spectrometry Method for the Analysis of Ceramides in Human Cell Lines**; John E. Hughes; Bhasha Desai; Jay C. Strum; Kathleen I. MacKenzie; *Glaxo SmithKline, RTP, NC*

MPM 318 **Metabolic Pathway Analysis Focused on Lipid Mediators by Electrospray Ionization-Mass Spectrometry**; Mayuko Ishida; Masayoshi Imagawa; Ryo Taguchi; *Nagoya City University, Nagoya, Japan*

MPM 319 **Analysis of Complex Mixtures of Neutral Lipids by Normal Phase Chromatography with Electrospray Mass Spectrometry**; Jonathan M. Curtis; Stacey Owen; Tanya MacGillivray; *Ocean Nutrition Canada, Halifax, Canada*

MPM 320 **Analysis and Characterisation of Large Mycolic Acid Molecules by Electron Capture HPLC-APCI-MS**; Anthony I. Mallet[1]; Angela M. Gernaey[2]; Janet E. Redman[2]; David E. Minnikin[2]; *[1]University of Greenwich, London, UK; [2]University of Newcastle, Newcastle, UK*

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MPN 321 **Use of Stable Labeled Compounds for Determination of a Drug's Metabolic Fate in a Complex Matrix**; Eva Duchoslav[1]; Lyle Burton[1]; Joern Krause[2]; Thomas Fechner[2]; Ulrich Pleiss[3]; Kerstin Hucke[3]; Karl Schmeer[3]; *[1]Sciex, Toronto, Canada; [2]Applied Biosystems, Langen, Germany; [3]Bayer AG, Wuppertal, Germany*

MPN 322 **A general protocol for assembly and consultation of a microbiological spectral library**; Jon G. Wilkes[1]; Larry G. Rushing[1]; Manuel Holcomb[1]; Rebecca A. Wynne[1]; Fatemeh Rafii[1]; Susan A. McCarthy[2]; Simon Letarte[3]; Michel J. Bertrand[3]; *[1]National Center, Toxicological Research, Jefferson, AR; [2]Ctr for Food Safety & Applied Nutrition, Dauphin Island, AL; [3]University of Montreal, Montreal, Canada*

MPN 323 **Use of Masking to Improve Characterization of Bacteria Based on their MALDI/TOF Mass Spectra Using Pattern Recognition Techniques**; Martha L. Gay; Frederick S. Fry; Denis Andrzejewski; Steven M. Musser; *Food and Drug Administration, Washington, DC*

MPN 324 **Classification of GC-MS Data of Epicuticular Hydrocarbons from Tetramorium Ants by Self-Organizing Maps for Morphological Determinations**; Alexej Nikiforov[1]; Birgit Schlick-Steiner[2]; Florian Steiner[2]; Roland Kalb[1]; Robert Mistrik[3]; *[1]Institute of Org Chemistry – University Vienna, Vienna, Austria; [2]Inst. of Zoology - University Agriculture, Vienna, Austria; [3]HighChem Ltd., Bratislava, Slovakia*

MPN 325 **Identifying Unknowns with LC/MS/MS Data Using TSCA Chemical Inventory or SciFinder**; James L. Little; *Eastman Chemical Company, Kingsport, TN*

MPN 326 **Development of Searchable Pesticide MS and MS-MS Libraries**; Jane K. Klassen[1]; Steven J. Lehotay[2]; Quan-long Pu[1]; Joseph M Conny[1]; *[1]NIST, Gaithersburg, MD; [2]USDA, Wyndmoor, PA*

MPN 327 **Automated Data Capture and Retrieval: Linking Open Access Analysis to a Scientific Desktop Application**; Thomas McLellan[1]; Qing Liao[2]; Steve Trudel[1]; Douglas Phillips[1]; Michele Kelly[1]; *[1]Pfizer Global R&D, Groton, CT; [2]Harvard University, Boston, MA*

MPN 328 **Development of a Visual Basic Application to Automate Data Acquisition, Processing, and Sample Tracking on a Multiplexed Quadrupole LC/MS System**; Rongda Xu[1]; Zhe Cai[1]; Andrew Brailsford[2]; Brian W. Smith[2]; Daniel B. Kassel[1]; *[1]Dupont Pharmaceuticals Research Labs, San Diego, CA; [2]Waters Corporation, Milford, MA*

MPN 329 **Building Data Libraries for Mass Spectrometric Analysis of Drug Sample Collections**; Lan Gao; Carl Beckner; Ken Matuszak; Xueheng Cheng; Hua Tang; David Burns; *Abbott Laboratories, Abbott Park, IL*

MPN 330 **The Use of a Web Based System for the Global Sharing, Archival, Retrieval and Visualization of Mass Spectrometry and Associated Data**; Dario Fiore[1]; Kathy O'Dea[1]; David Varley[2]; Steve Smith[2]; Gary Harland[2]; *[1]Scientific Software, Inc, Pleasanton, CA; [2]Micromass UK Ltd., Manchester, UK*

MPN 331 **Cross-Platform Image Correlation**; T. Gregory Schaaff[1]; Peter J. Todd[1]; John M. McMahon[1]; Anthony Majahad[2]; *[1]Oak Ridge National Laboratory, Oak Ridge, TN; [2]ETEX Corporation, Cambridge, MA*

MPN 332 **Improved Protein Sequence Mapping Capability with MALDI Quadrupole Time of Flight Instruments**; Marc Gentzel; Matthias Wilm; *EMBL, Heidelberg, Germany*

MPN 333 **A High-throughput Proteomics Data Station for Complex Data Handling, Integration, Automation, and Bioinformatics**; Weiqun Li; Jim Bernstein; Sue Peng; Dave Anderson; *Rigel Inc., S. San Francisco, CA*

MPN 334 **Optimization of Algorithms for Searching Protein Databases**; Eric van Uytven[1]; Werner Ens[1]; Kenneth G. Standing[1]; Ronald C. Beavis[2]; *[1]University of Manitoba, Winnipeg, Canada; [2]Proteometrics Canada, Winnipeg, Canada*

MPN 335 **MassAnalyzer - A Program for Fully Automated Protein and Peptide LC/MS Data Analyses**; Zhongqi Zhang; *Amgen Inc., Thousand Oaks, CA*

MPN 336 **Evaluation of Algorithms for PMF Protein Identification Using a High Throughput Database Integrated Control and Retrieval System**; Daniel C. Chamrad[1]; Gerhard Körting[2]; Kai Stühler[1]; Joachim Klose[3]; Helmut E. Meyer[1]; Martin Blüggel[2]; *[1]Proteinstrukturlabor, Ruhr-Universität, Bochum, Germany; [2]Bochum, Germany; [3]Charite Universität Sklinikum, Berlin, Germany*

MPN 337 **An Algorithm for Disulfide Mass Mapping Based on Partial Reduction/Cyanylation/CN-Induced Cleavage**; Jianfeng Qi; Wei Wu; Eric Torng; J. Throck Watson; J. Throck Watson; *Michigan State University, East Lansing, MI*

MPN 338 **Automated Molecular Assignment of Positive Ion Electrospray Mass Spectra for "Unknown" Compounds**; Jon D. Williams; Brian E. Weiner; James R. Ormand; Jimmy Bruner; David J. Burinsky; *GlaxoSmithKline, RTP, NC*

MPN 339 **Automated Molecular Weight Determination from Adducts of ESI Spectra for Library Search**; Miriam Rittner[1]; Peter Sander[2]; Arnd Ingendoh[2]; Bernd Jastorff[1]; *[1]Center for Environmental Technology, Bremen, Germany; [2]Bruker Daltonik GmbH, Bremen, Germany*

MPN 340 **Compare LCMS - Extracting Component Differences in Similar LC/MS Data Sets**; Antony Williams[1]; Vitaly Lashin[1]; Ilya Troisky[1]; William Nichols[2]; Willem Windig[2]; *[1]Advanced Chemistry Development, Toronto, Canada; [2]Eastman Kodak Company, Rochester, NY*

MPN 341 **Automated Deconvolution of Protein Mass Spectra Obtained by Electrospray Mass Spectrometry**; Martin Ethier; Dimo Zidarov; Michel J. Bertrand; *University of Montreal, Montreal, Canada*

MPN 342 **A Computational Model for Predicting Electrospray Ionization Polarity Based on Chemical Structure**; Adam H. Brockman; Dave M. Potter; James F. Blake; John Janiszewski; Mark J. Cole; *Pfizer Inc., Groton, CT*

MPN 343 **A Simple Algorithm Improves Mass Accuracy to 50 ppm for Linear Delayed Extraction MALDI-TOF Measurements**; Christopher A. Hack; W. Henry Benner; *Lawrence Berkeley National Laboratory, Berkeley, CA*

MPN 344 **A Novel Approach for Process Control of Mass Spectral Data**; Kristin H. Jarman; Sharon T. Cebula; Nancy B. Valentine; Catherine E. Petersen; Jon H. Wahl; Karen L. Wahl; *Pacific Northwest National Laboratory, Richland, WA*

MPN 345 **Improved Mass Spectrometric Peak Detection by Accounting for Variable Noise Levels**; Anthony G. Ferrige[1]; M. Robert Alecio[1]; R. Stuart Ray[1]; Jon P. DeGnore[2]; Keith A. Waddell[2]; Xiaokui K. Zhang[3]; *[1]Positive Probability Limited, Isleham, U.K; [2]Applied Biosystems, Framingham, MA; [3]Genzyme Corporation, Framingham, MA*

MPN 346 **A New Approach for Automatic Data Reduction and Evaluation in High Resolution Time-of-Flight Mass Spectrometry Using a Time-to-Digital-Converter Data Recording System**; Valeri V. Raznikov[1]; Alexander R. Pikhtelev[1]; Alexander F. Dodonov[1]; Marina O. Raznikova[2]; *[1]Inst. of Energy Problems of Chem. Phys., Chernogolovka, Russia; [2]Institute of Problems of Chem. Phys., Chernogolovka, Russia*

MPN 347 **A New Echelle-Type Display for Visual Assignment of Ultrahigh-Resolution Mass Spectra**; Alan G. Marshall[1]; Christine A. Hughey[2]; Ryan P. Rodgers[2]; Christopher L. Hendrickson[2]; Kuangnan Qian[3]; *[1]National High Magnetic Field Laboratory, Tallahassee, Florida; [2]Florida State University, Tallahassee, FL; [3]ExxonMobil Research Engineering, Annandale, NJ*

MPN 348 **High-Throughput CI and EI-MS Analysis and Data Interpretation for Structural Confirmation of Synthesized Drug Candidates;** Timothy J. Nieuwenhuis[1]; Bruno J. D. Vansina[1]; David M. Guido[1]; James E. Carlson[1]; Olga V. Nemirovskiy[2]; W. Rodney Mathews[1]; *[1]Pharmacia Corporation, Lalamazoo, MI; [2]Monsanto Corporation, St. Louis, MO*

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MPO 349 **Evaluation of Stability of Self-Assembled Monolayers in Biosensors**; Weihong Gong; Ingrid Fritsch; Charles L. Wilkins; *University of Arkansas, Fayetteville, AR*

MPO 350 **Novel Routes for Synthesis and Patterning of Surfaces through Low-Energy Ion Deposition;** Nathan A. Wade; Chris A. Evans; Sung-Chan Jo; R. Graham Cooks; *Purdue University, West Lafayette, IN*

MPO 351 **Characterization of Multimetallic Grid-Type Complexes by Electrospray Mass Spectrometry**; Helene Nierengarten[1]; Emmanuelle Leize[1]; Jean-Marie Lehn[2]; Alain Van Dorsselaer[1]; *[1]University Louis Pasteur-CNRS-LSMBO, Strasbourg, France; [2]University Louis Pasteur CNRS-ISIS, Strasbourg, France*

MPO 352 **Hydrogen Generation From Metal-Based Chemical Reactive Heaters**; Joel Carlson; Joseph Jordan; *US Army SBCCOM - Natick Soldier Center, Natick, MA*

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MPP 354 **A Quadrupole Ion Trap Mass Spectrometer for Quantitative Analysis of Nitrogen-Purged Compartments within the Space Shuttle;** Andrew K. Ottens[1]; Timothy P. Griffin[2]; Richard A. Yost[1]; *[1]University of Florida, Dept of Chemistry, Gainesville, FL; [2]Dynacs Engineering Company, Inc., Kennedy Space Center, FL*

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MPQ 355 **Lifetime Distribution of Cluster Ions from Sputtering Ion Source**; Takaya Satoh; Hiroyuki Ito; Toshio Ichihara; Itsuo Katakuse; *Osaka University, Osaka, Japan*

MPQ 356 **Metal Selectivity in the Formation of Metallofullerenes and Metallocarbohedrenes Investigated by Laser Ablation FTICR Mass Spectrometry**; Rui Zhang; Keith J. Fisher; Gary D. Willett; *The University of New South Wales, Sydney, Australia*

MPQ 357 **Formation of Silver Clusters in Argon Droplets**; Irene I Rabin; Wilfried Schulze; Gerhard Ertl; *Fritz-Haber-Institut der MPG, Berlin, Germany*

MPQ 358 **Electrospray Ionization Fourier Transform Ion Cyclotron Resonance Mass Spectrometric Characterization of Supermolecular Self-Assembled Transition Metal Ion Clusters**; Robert E. Bossio[1]; Brian D. Moulton[2]; Michael Zaworotko[2]; Alan G. Marshall[3]; *[1]Florida State University, Tallahassee, FL; [2]University of South Florida, Tampa, FL; [3]National High Magnetic Field Laboratory, Tallahassee, FL*

MPQ 359 **ESI MS in the Detection of Diiron Catalytic Species in Biomimetic Oxidation Reactions**; Kirsten H. Lund[1]; Christine J. McKenzie[1]; Richard H. Fish[2]; *[1]University of Southern Denmark, Odense, Denmark; [2]University of California, Berkeley, CA*

MPQ 360 **Two Case Studies of Nano-ESI MS Analysis of Inorganic Complexes**; Jessica Lucas; John M. Koomen; Cristian S. Campos-Fernandez; Kim R. Dunbar; Mason Haneline; Julie Beckwith; Francois Gabbai; David H. Russell; *Texas A&M University, College Station, TX*

MPQ 361 **Characterization of Uranium Speciation on the Surface Using Static SIMS**; Gary L. Gresham; Gary S. Groenewold; Anthony D. Appelhans; John E. Olson; Bruce J. Mincher; Jani C. Ingram; *INEEL, Idaho Falls, ID*